

## **6.3 Biological Resources**

### **6.3.1 Introduction**

Riverside Public Utilities (RPU) proposes to build and operate a nominal 96-megawatt (MW) simple-cycle power plant on a 12-acre fenced site within the City of Riverside, California. This proposed facility is referred to as the Riverside Energy Resource Center (RERC) Project (Project). RPU will develop, build, own and operate the facility. RERC will supply the internal needs of the City of Riverside during summer peak electrical demands and will serve the City's minimum emergency loads in the event RPU is islanded from the external transmission system. No power from RERC will be exported outside of the city.

The following sections in this document, adhering to the scope of work set forth in Instructions to the California Energy Commission Staff for the review of and Information Requirements for an Application for Certification (CEC 1992) and Rules of Practice and Procedure & Power Plant Site Certification Regulations (CEC 1997), are as follows:

Description of Laws, Regulations and Standards (LORS) applicable to the consideration of biological resources

- ♦ Biological setting
- ♦ Literature review and previous work in the area
- ♦ Field survey methods
- ♦ Field survey findings and description of biological resources near the project area
- ♦ Description of the impacts of construction on biological resources
- ♦ Mitigation Measures to avoid impacts to biological resources
- ♦ References Cited

The biological resources investigation was directed by Mr. Brian Arnold, SWCA's Program Director for Biological Resources in California, with over 20 years of experience conducting biological investigations. The biological resources investigation was designed to fulfill the requirements of the California Energy Commission, and for compliance with the Federal Endangered Species Act (FESA, 16 USC 153 et seq.), the Migratory Bird Treaty Act (16 USC 703 to 711), the California Endangered Species Act (CESA, Fish and Game Code Section 2050 et seq.), and the California Environmental Quality Act (CEQA, Section 15380 of the Guidelines and Section 21104.2 of the Public Resources Code).

Sensitive biological resources considered in this document consist of plant species officially listed as threatened, endangered, or rare by the federal or state government, plants proposed for such listing by the state or federal government, and those plants that are candidates for listing by the state (California Department of Fish and Game (CDFG) 2004a); wildlife species officially listed as threatened or endangered by the federal or state government, wildlife species proposed for such listing by the state or federal

government, and those wildlife species that are candidates for listing by the state (CDFG 2004b); federal candidate species (U.S. Fish and Wildlife Service (USFWS) 2002); federal species of concern, California species of special concern, California special animals (CDFG 2004c); California special plants (CDFG 2004d); California fully protected animals; and plants included on the California Native Plant Society (CNPS) lists of rare, threatened and endangered plants in California (CNPS 2001).

### ***6.3.1.1 Site Description***

The proposed site is owned by the City of Riverside and is located adjacent to the City of Riverside's Wastewater Treatment Plant (WWTP) in a light industrial/manufacturing area. The RERC will consist of two aero-derivative combustion turbine generators with selective catalytic reduction (SCR), an on-site substation, approximately 1.75 miles of 69kV transmission line, natural gas and water supply interconnection, and on-site administration building and warehouse. The power plant and associated administration building and warehouse will occupy approximately 8 of the 12 acres with the additional 4 acres reserved for equipment storage and construction parking. The entire plant perimeter will be fenced with a combination of chain-link fencing and architectural block walls.

### **6.3.2 Laws, Ordinances, Regulations and Standards (LORS)**

This following is a discussion of the applicable laws, ordinances, regulations and standards governing biological resources, some of which must be adhered to prior to and during construction of the proposed Riverside Energy Center. Included in this discussion are federal, state and local ordinances.

#### ***6.3.2.1 Federal LORS***

##### **Federal Endangered Species Act (FESA, 16 USC 153 et seq.)**

Applicants for projects that could result in adverse impacts to any federally listed species are required to mitigate potential impacts in consultation with the USFWS. Adverse impacts, defined as "take," are prohibited except under authorization through Section 7 or Section 10 consultation, and Incidental Take Authorization. During consultations, determinations are made regarding the proposed project and its potential to jeopardize the continued existence of federally listed species, and reasonable and prudent mitigation measures required to avoid such 'jeopardy'. Mitigation is required for adverse impacts to any listed species or candidate species proposed for listing. Take, under Federal definition, currently includes actions that could result in "significant habitat modification or degradation" (50 CFR Section 17.3).

Candidate species do not enjoy full protection of FESA. However, the USFWS advises project applicants that Candidate species could be elevated to listed status at any time, and should be regarded as species with special consideration.

The proposed project is within the area covered by the Western Riverside County Multi-Species Habitat Conservation Plan (WRC MSHCP). The WRC MSHCP includes compensation requirements for take of certain federal species and their habitat in accordance with FESA Section 10(a)(1)(B). The WRC MSHCP also includes prescribed protection and mitigation measures approved by USFWS.

### **Migratory Bird Treaty Act (MBTA 16 USC 703 to 711)**

The MBTA prevents the take of all migratory birds, including their nests and eggs.

### **Bald and Golden Eagle Protection Act (16 USC 668)**

This Act specifically protects bald and golden eagles from being killed or their eggs taken.

### **6.3.2.2 *State LORS***

#### **California Endangered Species Act (Fish & Game Code Section 2050 et seq.)**

Species listed under the CESA cannot be taken or harmed, except under specific permit. As currently stated in the Act, “take” means to hunt, pursue, catch, capture, or kill or to attempt to do so. As stated above, the proposed project is within the area covered by the WRC MSHCP. The MSHCP also includes compensation requirements for take of state listed species and their habitat in accordance with CESA. The WRC MSHCP also includes prescribed protection and mitigation measures approved by the California Department of Fish and Game (CDFG) for sensitive species.

#### **Fish and Game Code Sections 3511, 4700, 5050, and 5515**

These Sections provide a provision for the protection of bird, mammal, reptile, amphibian, and fish species that are “fully protected.” Fully protected animals may not be harmed, taken, or possessed.

#### **Fish and Game Code Section 3503**

This Section states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this Code or any regulation made pursuant thereto.

#### **Fish and Game Code Section 3503.5**

This Section provides protection for all birds-of-prey, including their eggs and nests.

#### **Fish and Game Code Section 3513**

This Section makes it unlawful to take or possess any migratory non-game bird as designated in the MBTA.

#### **Fish and Game Code Sections 1900 et seq., or Native Plant Protection Act**

This Section lists threatened, endangered, and rare plants so designated by the California Fish and Game Commission.

#### **Title 14, California Code of Regulations, Sections 670.2 and 670.5**

These Sections list animals designated as threatened or endangered in California. The CDFG designates species considered to be indicators of regional habitat changes, or candidate species for future state listing, as California Species of Concern (CSC). CSCs do not have special legal status, but are used by the CDFG as a management tool when considering the future use of any land parcel.

### **California Fish and Game Code (Sections 1601 through 1607)**

These Sections prohibit alteration of any lake or streambed, including intermittent and seasonal channels and many artificial channels, without execution of a Streambed Alteration Agreement through the CDFG. This applies to any channel modifications that would be required to meet drainage, transportation or flood control objectives of the project.

### **California Environmental Quality Act (CEQA)**

CEQA requires that a project's effects on environmental resources must be analyzed and assessed using criteria determined by the lead agency. CEQA defines a rare species in a broader sense than the definitions of threatened, endangered, or CSC. Under this definition, CDFG can request additional consideration of species not otherwise protected.

### **Warren Alquist Act**

This Act is a CEQA-equivalent process implemented by the CEC.

### **6.3.2.3 Local LORS**

#### **Applicable Habitat Conservation Plans**

The project is in the area covered by the WRC MSHCP. The WRC MSHCP includes prescribed compensation guidelines, conservation strategies, and minimization measures to mitigate for potential project impacts to sensitive species and their habitats.

### **6.3.3 Biological Setting**

The following describes the biological conditions in the project area, including vegetation and habitat types, as well as the sensitive species that are known to occur, or have the potential to occur, in the vicinity of the project site.

#### **6.3.3.1 Methods**

##### **Literature Review**

A compilation of federal and state sensitive plant and wildlife species was prepared for the project from database and literature searches. References searched included the 2004 California Natural Diversity Database (CNDDDB), the CNPS Electronic Inventory, and the WRC MSHCP interactive species map ([www.ecoregion.ucr.edu](http://www.ecoregion.ucr.edu)). The CNDDDB and CNPS searches were performed for the Riverside West, Riverside East, Corona North, Guasti, Fontana, San Bernardino South, Corona South, Lake Mathews, and Steele Peak 7.5-minute United States Geological Survey (USGS) quadrangles. The WRC MSHCP search included species within a 2.5-kilometer radius of the project area.

##### **Field Visits**

A total of five biological reconnaissance-level field visits were conducted at the proposed RERC project site by Brian Arnold in 2003 and 2004, as shown in Table 3-1. During these reconnaissance-level field visits, plant and wildlife species observed were noted, vegetation communities present were characterized and mapped, and sensitive plant and wildlife species searches were carried out. Particular attention was focused on the boulder

piles within the project area (see below). During the initial site visit, the attic and roof tiles of the original wastewater treatment plant office building were examined for sign of roosting bats. This old building, constructed in 1942 of cast-concrete-and-brick with red barrel-tile roof, would provide the nearest roosting site to the proposed plant site for bats.

**Table 6.3-1 Biological Surveys Conducted at the RERC Project Site**

Survey Type	Surveyor	Date	Time	Weather
Initial Vegetation Mapping, Burrowing Owl and Bat Survey	Brian Arnold	22 December 2003	1100 - 1630	Mostly overcast, Slight Breeze, about 55° F
Burrowing Owl	Brian Arnold	4 February 2004	1315 - 1700	Mostly Sunny, Slight to Brisk Breeze, about 65° F
Sensitive Plants and Burrowing Owl	Brian Arnold	1 March 2004	1420 - 1620	Overcast, Calm, about 59° F
Sensitive Plants and Burrowing Owl	Brian Arnold	10 April 2004	0830 - 1000	Overcast, Slight Breeze, about 60° F
Sensitive Plants and Burrowing Owl	Brian Arnold	18 April 2004	1230 - 1345	Clear, Sunny, Slight Breeze, about 68° F

### **6.3.3.2 General Vegetation and Habitat**

#### **Vegetation**

##### Plant Site

The entire 12-acre proposed plant site has been previously disturbed. The entire plant site had been used as a borrow area for the Tequesquite Landfill located about four kilometers to the east. About ten years ago, as much as approximately ten meters of soil was removed from the southern portion of the parcel, with less removed from the northern portion nearer the existing wastewater treatment plant facilities. As such, the elevation of the parcel was substantially lowered. During its use as a borrow area, the entire site was disturbed by heavy grading and excavating equipment. Naturally occurring boulders that had apparently originally been under the surface were removed and stockpiled in about six large groups and six smaller groups located throughout the site. Currently the large boulder piles are as much as 10 to 15 feet in height above the surrounding substrate, with the smaller piles about three or four feet in height. The proposed plant site supports no undisturbed, high quality native vegetation. The general distribution of the vegetation types occurring at the proposed plant site is shown on Figure 6.3-1.

Vegetation at the plant site currently consists of a mosaic of non-native grassland and an early successional, disturbed stage of coastal sage scrub herein referred to as buckwheat scrub. The buckwheat scrub consists nearly entirely of flattop buckwheat (*Eriogonum fasciculatum*). The site is apparently mowed annually for fire control purposes. As such,

the flattop buckwheat on the site does not attain much of a woody, shrubby stature. The non-native grassland is dominated by several species of introduced grasses and forbs, with a very few native herb species also present.

#### Transmission Line

The transmission line alignment traverses areas that have been either developed and landscaped or are heavily and continually disturbed for most of its approximately 1.75 mile length. The alignment passes adjacent to several areas of non-native grassland and ruderal vegetation, as described below. However, the proposed transmission line would be located immediately adjacent to existing roads and existing transmission lines at the edge of these non-native grassland and ruderal areas.

The transmission line would leave the plant site and proceed south along the eastern side of Payton Avenue towards Jurupa Avenue. Along the east side of Payton Avenue, the vegetation can be characterized in three roughly equal-sized parcels as disturbed non-native grassland at the beginning of the transmission line, then a large completely disturbed cleared lot currently used for vehicle and boat storage, then a routinely disked non-native grassland at the northeast corner of Payton and Jurupa. Along the south side of Jurupa between Payton and Wilderness, the transmission line would traverse a completely developed and landscaped area. Between Wilderness and just past Columbus, the transmission line would traverse disked non-native grassland, with the exception of a small green manicured lawn around the entrance to the Wall Street Journal office complex. From just past Columbus to Mountain View, the transmission line would traverse disked non-native grassland. From Mountain View to Essex, the transmission line would traverse a completely developed and landscaped area. From Essex to Chester, the transmission line would traverse disked non-native grassland. From Chester to Florence, the transmission line would traverse a completely developed and landscaped area. From Florence to just past Williams Street, the transmission line would traverse an area of dense Russian thistle (*Salsola tragus*) characterized as ruderal vegetation. From just past the southeast corner of Jurupa and Williams Street, the transmission line would traverse disturbed areas adjacent to the railroad tracks to the existing substation, which is also characterized as disturbed.

#### Habitat Types

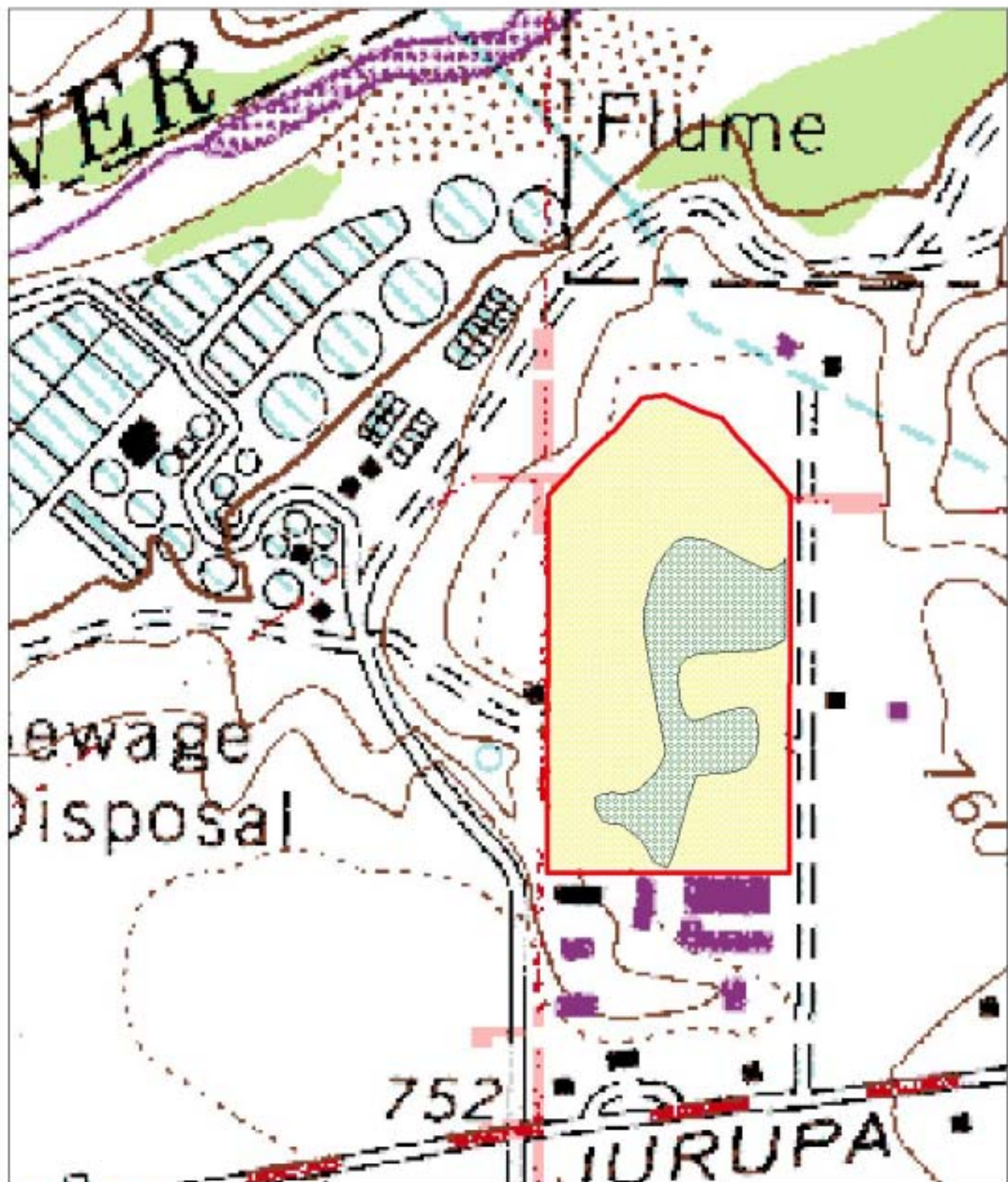
The habitat types present at the 12-acre proposed plant site include non-native grassland and degraded coastal sage scrub, consisting entirely of flattop buckwheat as described above. Disturbed and developed and landscaped areas predominate along the approximately 1.75-mile transmission line alignment. In a few areas, the habitat can be characterized as non-native grassland and ruderal.

#### **Wetlands**

##### Plant Site

Wetlands and waters of the United States are defined by the U.S. Army Corps of Engineers by the presence of hydric soils, hydrophytic vegetation, and wetland hydrology





**SWCA**  
ENVIRONMENTAL CONSULTANTS

Map Source: USGS 7.5' Quad:  
RIVERSIDE WEST



0 333 feet  
0 83 meter  
1:4,000

- Site Location
- Buckwheat Scrub
- Non-Native Grassland

**Vegetation at the Proposed  
Riverside Energy Center  
Plant Site**

(Environmental Laboratory 1987). As noted above, the entire 12-acre proposed plant site has been previously disturbed. Extensive wetlands and waters of the U.S. are located along the Santa Ana River, including immediately adjacent to the City's Water Quality Control Plant. In fact, reclaimed water from the City's Water Quality Control Plant treatment process is used to help support the Hidden Valley Wetlands just below the treatment plant. However, no wetlands, waters of the U.S. or other jurisdictional features are present at the proposed plant site.

Southern cottonwood willow riparian forest occurs throughout southern California, in riparian areas along major rivers and streams. According to the CNDDDB, three occurrences of this element have been recorded within five miles of the project area. One is located along the Santa Ana River channel, a second is located approximately 4.1 miles southeast of the project area along a small stream draining the El Sobrante Hills, while the third is located on the shores of Mockingbird Reservoir, approximately 4.8 miles south of the project area. Extensive riparian vegetation is located along the Santa Ana River, including immediately adjacent to the City's Water Quality Control Plant. In fact, reclaimed water from the City's Water Quality Control Plant treatment process is used to help support the extensive riparian vegetation just below the treatment plant. However, no riparian vegetation is present at the proposed plant site.

#### Transmission Line

Standing water was present during the field visits immediately adjacent to the east side of Payton Avenue, south of the plant site. This standing water appears to have collected in a slight depression adjacent to the length of this portion of Payton Avenue due to grading work apparently associated with the vehicle and boat storage lot and other industrial laydown lots located to the east. This standing water did not appear to support any type of associated hydrophytic vegetation or insect fauna, and does not appear to flow. As such, it does not appear to represent a jurisdictional feature.

#### **General Plant and Wildlife Species**

The non-native grassland at the plant site is dominated by several species of introduced grasses including red brome (*Bromus madritensis* ssp. *rubens*), wild oat (*Avena fatua*), Mediterranean grass (*Schismus barbatus*), and introduced forbs including red-stem filaree (*Erodium cicutarium*), cheeseweed (*Malva parvaflora*), field mustard (*Hirschfeldia incana*), and Russian thistle. In addition to the introduced species that make up the majority of the non-native grassland vegetation, the native California poppy (*Eschscholzia californica*) and Rancher's fireweed (*Amsinckia menziesii*) are present. A few highly scattered arroyo lupine (*Lupinus succulentus*) and pearly everlasting (*Gnaphalium californicum*) are also present. Plants observed during the field visits are presented in Appendix 6.3-A.

The proposed plant site has been highly modified and is more or less isolated, surrounded by intense development to the north, west and south. These factors contribute to limit the diversity of wildlife species that potentially occur at the site. The number of wildlife species that use the site to forage and breed is in sharp contrast to the nearby Santa Ana River, where numerous wildlife species use the river channel during foraging, and during movements or dispersal. In spite of having been greatly modified during previous grading



activities, the proposed plant site is covered in herbaceous vegetation. This open vegetation, although apparently mowed annually, attracts a number of species that forage in open field habitat, as well as fossorial mammals, their commensals, and their predators. Wildlife species that forage in, or are otherwise attracted to, open fields were observed at the site. Common and characteristic wildlife species that were observed during the field visits include side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), killdeer (*Charadrius vociferus*), rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), common raven (*Corvus corax*), European starling (*Sturnus vulgaris*), house finch (*Carpodacus mexicanus*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and deer mouse (*Peromyscus maniculatus*). Wildlife species observed during the field visits are presented in Appendix 6.3-B. No evidence of nests or other sign of breeding birds was recorded during the field visits.

### **Sensitive Plant and Wildlife Species**

The database searches and literature review resulted in a compilation of sensitive plant and wildlife species previously identified or potentially occurring in the general vicinity of the proposed project. Sensitive plant species potentially occurring in the region of the proposed project site are included in Appendix 6.3-C, while sensitive wildlife species potentially occurring are included in Appendix 6.3-D. Appendix 6.3-C and 6.3-D include a brief description of suitable habitat typically associated with each species, critical seasonal periods associated with the species' natural history, and additional appropriate comments. A map showing the location of the project area and CNDDDB search results is presented in Figure 6.3-2.

#### Sensitive Plants

No sensitive plant species were included in the CNNDDB and CNPS database searches for the proposed project area. No sensitive plant species were identified during the five field visits. The vegetation at the site is apparently maintained by annual mowing activities. This, combined with the disturbed nature of the site, would preclude most sensitive plant species from occurring at the site. The areas of non-native grassland along the proposed transmission line are routinely mowed or disked. As such, sensitive plants do not likely occur at the proposed plant site or along the proposed transmission line.

The literature and database review revealed that a number of sensitive plant species or communities are known from localities within five miles of the project site. In addition, the WRC MSHCP requires a Habitat Assessment for an additional sensitive plant species, Brand's phacelia (*Phacelia stellaris*), in an area that includes the proposed plant site. A description of these sensitive plants, including their locations in relation to the project site, their habitats, and their potential occurrence at the project site, is presented below.

#### **San Diego Ambrosia (*Ambrosia pumila*)**

The San Diego ambrosia has a very limited distribution, and occurs only in Riverside and San Diego counties. Habitats for this plant include flat or sloping grasslands, often along valley bottoms, in river floodplains, or areas adjacent to vernal pools. It is a fairly hardy species, and is known to occupy superficially disturbed ruderal habitats, including

roadsides and lawns. The one known occurrence within five miles of the project site was recorded in 1940; more recent surveys of the area have determined that this population has since been extirpated. Due to the nature of the previous disturbance at the project site, San Diego ambrosia does not likely occur at the proposed plant site. San Diego ambrosia was not observed at the plant site or along the transmission line alignment during the field visits.

Parry's Spineflower (*Chorizanthe parryi* var. *parryi*)

Parry's spineflower is restricted to alluvial floodplains and alluvial chaparral and scrub habitats in western Riverside County. It inhabits dry slopes and flats with dry, sandy soils. The one known occurrence of this element is from the University of California, Riverside Experiment Station, approximately five miles east of the project area, from a collection made in 1917. This population may still be extant. Due to the nature of the previous disturbance at the project site, Parry's spineflower does not likely occur at the proposed plant site. Due to the continual disturbance of non-native grassland, Parry's spineflower does not likely occur along the proposed transmission line. Parry's spineflower was not observed at the plant site or along the transmission line alignment during the field visits.

Santa Ana River Woollystar (*Eriastrum densifolium* ssp. *sanctorum*)

The Santa Ana River woollystar occurs on sandy soils in open washes and early-successional alluvial fan scrub habitats, and on terraced fluvial deposits where flooding and scouring allows for the persistence of open shrubland habitat, such as coastal scrub or chaparral. One woollystar occurrence is known within five miles of the project area, within the Santa Ana River channel approximately four miles northeast of the project area. The occurrence was recorded in 1994, and the population is presumed extant. Because the project area is located at a distance from the Santa Ana River channel, and there are no washes or terraced fluvial deposits, there is a low potential for this element to occur. Santa Ana River woollystar was not observed at the plant site or along the transmission line alignment during the field visits.

Rayless Ragwort (*Senecio aphanactis*)

The rayless ragwort occurs among drying alkaline flats in coastal sage scrub, chaparral, and cismontane woodlands. The only known occurrence of this element is from a 1909 collection from a general location in "western Riverside County." Very little is known about this species due to its rarity. Due to the nature of the previous disturbance at the project site, rayless ragwort does not likely occur at the proposed plant site. Due to the continual disturbance, rayless ragwort does not likely occur along the proposed transmission line. Rayless ragwort was not observed at the plant site or along the transmission line alignment during the field visits.

Brand's Phacelia (*Phacelia stellaris*)

Brand's phacelia was identified in the WRC MSHCP as requiring a Habitat Assessment for projects within a designated area including the site of the proposed RERC. Suitable habitat for Brand's phacelia includes coastal dunes and sandy openings in coastal sage scrub, sandy benches, dunes, sandy washes, or flood plains of rivers. This species is

nearly extirpated in the United States, and is apparently quite rare in Baja California, Mexico. This species appears to be restricted to sandy benches along the Santa Ana River. The largest known population of this species occurs in the Santa Ana Mountains in the Agua Tibia Wilderness Area in southwestern Riverside County. Due to the nature of the previous disturbance at the project site, Brand's phacelia does not likely occur at the proposed plant site. Due to the continual disturbance, Brand's phacelia does not likely occur along the proposed transmission line. Brand's phacelia was not observed at the plant site or along the transmission line alignment during the field visits. Appropriate Brand's phacelia habitat does not occur at the plant site or along the transmission line.

### Sensitive Wildlife

No sensitive wildlife species were included in the CNNDDB database searches for the proposed project area. One sensitive wildlife species was identified during the five field visits, as discussed below. The vegetation at the site is apparently maintained by annual mowing activities. This, combined with the disturbed nature of the site, would preclude many sensitive wildlife species from breeding at the site. The areas of non-native grassland along the proposed transmission line are routinely mowed or disked. As such, sensitive wildlife species do not likely breed at the proposed plant site or along the proposed transmission line.

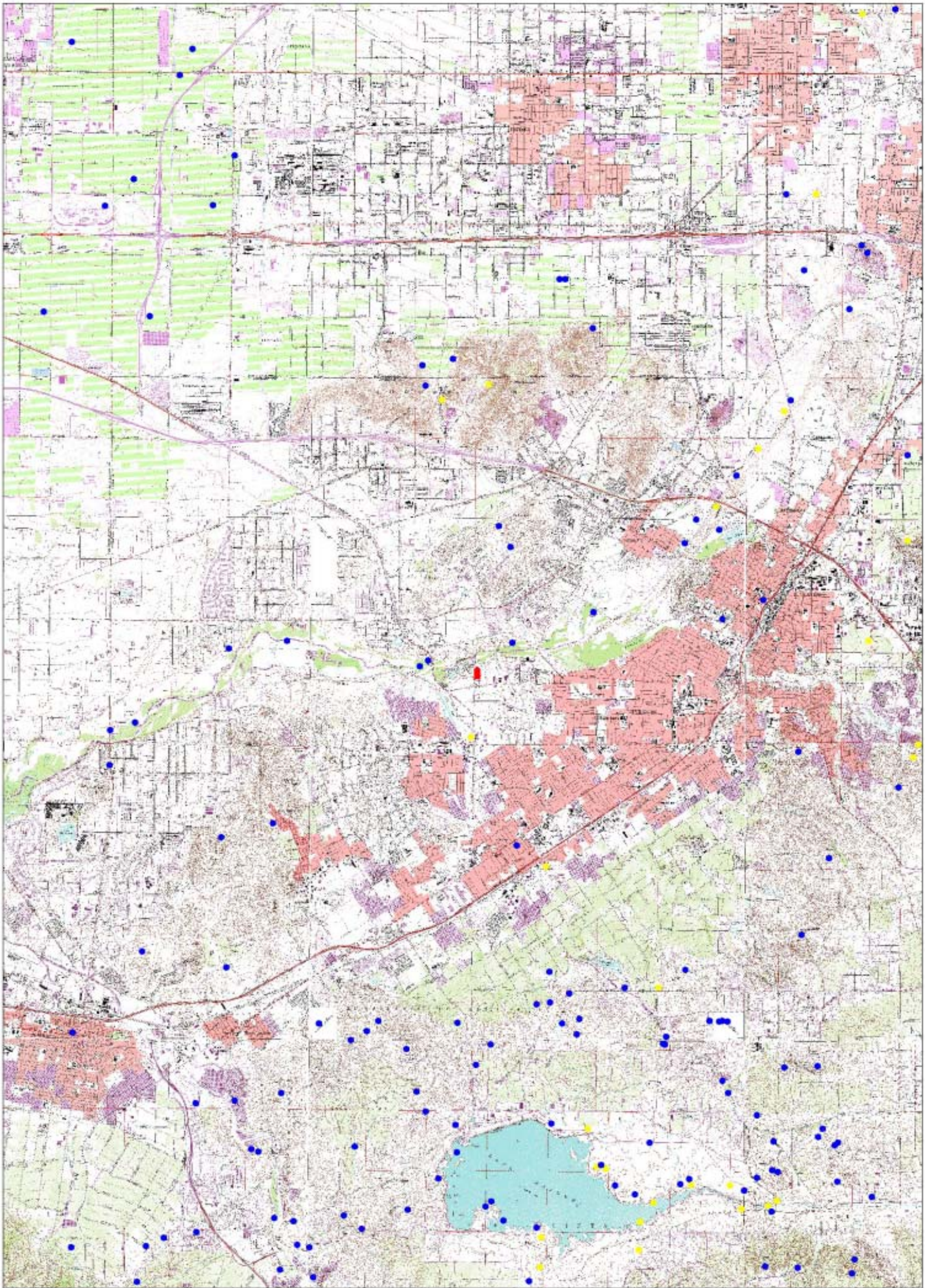
The literature and database review revealed that a number of sensitive wildlife species are known from localities within five miles of the project site. In addition, the WRC MSHCP requires a Habitat Assessment for an additional sensitive wildlife species, burrowing owl (*Athene cunicularia*) in an area that includes the proposed plant site. A description of these sensitive wildlife species, including their locations in relation to the project site, their habitats, and their potential occurrence at the project site, is presented below.

#### Burrowing Owl (*Athene cunicularia*)

Burrowing owls occur primarily in agricultural and grassland areas of interior and coastal valleys. They prefer dry, open, treeless grassland and desert scrubland, often in areas with little or no vegetation. Burrowing owls can also occupy and breed in highly modified habitats, including golf courses, airports, cemeteries, in vacant lots in residential areas, and along shoulders of roadways. Typically, they occupy abandoned ground squirrel burrows. Breeding usually begins during March or April in southern California. Along coastal southern California, the distribution of the burrowing owl has been greatly reduced and localized due to loss of habitat through development.

Burrowing owls require large, open expanses of sparsely vegetated areas on gently rolling or level terrain, with an abundance of active small mammal burrows, particularly those of the California ground squirrel. The burrows of these rodents are a critical habitat feature for burrowing owls, as they modify and use squirrel (and other rodent) burrows for refugia, roosting, and nesting. They sometimes use artificial features, such as pipes, culverts, and nest boxes in areas where squirrel burrows are scarce (Robertson 1929). Mammal burrows are modified and enlarged by the owls. One burrow is typically used for nesting. However, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl.





**SWCA**  
ENVIRONMENTAL CONSULTANTS

Map Source: USGS 7.5' Quad:  
GUASTI, FONTANA,  
SAN BERNARDINO SOUTH,  
CORONA NORTH,  
RIVERSIDE EAST,  
CORONA SOUTH, LAKE MATTHEWS,  
STEELE PEAK  
Database Source: CNDDB  
March 2, 2004



0 8000  
feet  
0 2000  
meter  
1:96,000

- Site Location
- Plants
- Animals

Results of the  
California Natural  
Diversity Database  
Search



The burrowing owl is crepuscular, foraging at or near dawn and dusk. They hunt by using short flights, running along the ground, hovering, or by using an elevated perch from which prey is spotted. They are opportunistic foragers (Haug et al. 1993) and their prey includes invertebrates and small vertebrates (Thomsen 1971). Their diet is composed of a variety of foods, including primarily mice (*Peromyscus* spp. and *Microtus* spp.) and beetles. Beetles are taken with more frequency. However, per biomass, *Peromyscus* mice are dominant, followed by *Microtus* mice (Marti 1974). Although they eat mostly insects and small mammals, burrowing owls also may take reptiles, birds, and carrion. During the breeding season, there are significant declines in the percentage of vertebrate prey in the diet and increases in the invertebrate prey (Haug et al. 1993).

Burrowing owls typically nest in modified burrows of California ground squirrels (or other small rodents); the burrows of badgers are used on occasion. The nest chamber is lined with excrement, pellets, debris, grass, feathers; sometimes it is unlined. The male attracts a female to the burrow, and defends the nest site by calling in front of the burrow. Breeding occurs from March through August, with a peak in April and May. Clutch size is 6-11, with an average of 7-9 eggs; clutch size may increase in more northerly populations (Bent 1938). The young emerge from the burrow at about two weeks, and can fly by about four weeks (Zarn 1974). Martin (1973) reported that 95 percent of the young fledged in one population, with a mean reproductive success of 4.9 young per pair.

The burrowing owl is fairly uncommon in the vicinity of the project area. Although one owl was observed at the proposed plant site during the course of the current investigation, no other burrowing owl occurrences are known from within five miles of the project area. The closest known records of the owl are from a grassland area in the hills south of Riverside approximately six miles south-southeast of the project area; an agricultural field near Fontana approximately 6.5 miles north of the project area; the Corona Municipal Airport located approximately nine miles southwest of the project area; an old field cleared for development east of Ontario approximately 10 miles northwest of the project area; a non-native grassland associated with new development east of Ontario approximately 13 miles northwest of the project area; an old, recently cleared vineyard east of Ontario approximately 13 miles northwest of the project area; and an agricultural field east of Rancho Cucamonga approximately 20 miles northwest of the project area.

During the 22 December 2003 field visit, a single burrowing owl was observed at the mouth of a burrow in the northernmost boulder pile. The owl was observed standing in front of the burrow. The burrow is located approximately 225 feet south of the edge of pavement of the access road just south of the Headworks Building, and about 265 feet south of the building itself. The access road is used on a regular basis by trucks and recreational vehicles that pump wastewater into underground receptacles within 300 feet of the burrow. This December 2003 field visit was conducted during the period when wintering owls are most likely to be present.

The burrowing owl was not observed during four subsequent field visits conducted during early February, early March, early April and mid-April 2004. As such, it appears that this owl was using the proposed plant site for wintering. If breeding activities were occurring at the proposed plant site, owls would have been visible during the other field visits, in particular the 18 April field visit, as this date is within the peak of the breeding

season. During the initial field visits, the entire site was traversed using 10-meter wide parallel belt transects to search for California ground squirrel and other burrows that could be used by burrowing owls. Later field visits concentrated on the boulder piles, as these are the only areas on the proposed plant site that contain California ground squirrel burrows, including the burrow at which the single burrowing owl was observed during the December 2003 field visit.

A single degraded burrow was observed along the transmission line alignment just east of Payton Avenue east of the proposed plant site during the December 2003 field visit. Over the course of the four subsequent field visits, this burrow continued to degrade. No burrowing owls were observed along the transmission line alignment, nor are they likely to occur.

#### Arroyo Chub (*Gila orcutti*)

The arroyo chub inhabits fluctuating streams of the Los Angeles Plain. They prefer slow moving or backwater sections of warm to cool streams with substrates of sand or mud in depths of greater than 40 centimeters. Several occurrences of this species area known within five miles of the project area, all within the Santa Ana River located just to the north of the project area. However, no water features are present at the proposed plant site, and there are no water features capable of supporting fish present along the proposed transmission line alignment. Due to lack of suitable habitat at the proposed plant site and along the proposed transmission line alignment, the arroyo chub does not occur.

#### Santa Ana Sucker (*Catostomus santaanae*)

The Santa Ana sucker generally lives in small, shallow streams with currents ranging from swift in canyons to sluggish in river bottoms. They prefer sandy or rocky bottoms, clear water, and access to algae, their preferred dietary item. Several occurrences of this species are known from within five miles of the project area - all within the Santa Ana River located just to the north of the project area. However, no water features are present at the proposed plant site, and there are no water features capable of supporting fish present along the proposed transmission line alignment. Due to lack of suitable habitat at the proposed plant site and along the proposed transmission line alignment, the Santa Ana sucker does not occur.

#### Coast (San Diego) Horned Lizard (*Phrynosoma coronatum* /*blainvillei*/)

The coast or San Diego horned lizard inhabits coastal sage scrub and chaparral in areas of friable, rocky, or sandy soils in arid to semi-arid conditions. One known occurrence of this taxon is known from within five miles of the project area. This occurrence from 1951 is in an area located approximately 2.75 miles south of the project area. The area has since been developed, and the population there has likely been extirpated. Due to the nature of the previous disturbance at the project site, horned lizards do not likely occur at the proposed plant site. Due to the continual disturbance, horned lizards do not likely occur along the proposed transmission line. Horned lizards were not observed at the plant site or along the transmission line alignment during the field visits.

Northern Red-diamond Rattlesnake (*Crotalus ruber ruber*)

The northern red-diamond rattlesnake is most commonly associated with large rocks or boulders among heavy brush, including dense chaparral, coastal sage scrub, and desert slope scrub associations. An occurrence is known from an area approximately four miles northeast of the project area. As the record was from a 1959 collection, and because the area has been subsequently developed, the population there has likely been extirpated. Because rattlesnakes shy from areas developed by humans, there is little potential for this species to occur within the project area. Due to the nature of the previous disturbance at the project site and the lack of dense vegetation, red-diamond rattlesnakes do not likely occur at the proposed plant site. Due to the continual disturbance, red-diamond rattlesnakes do not likely occur along the proposed transmission line. Red-diamond rattlesnakes were not observed at the plant site or along the transmission line alignment during the field visits.

Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)

The western yellow-billed cuckoo is a Neotropical migrant that breeds in North America during the summer. This species requires dense, wide riparian woodlands with well-developed understories for breeding habitat. One occurrence for this element is known from a riparian woodland located approximately 1.5 miles northeast of the project area. However, due to the nature of the previous disturbance at the project site and the lack of riparian vegetation, western yellow-billed cuckoos do not occur at the proposed plant site. Due to the continual disturbance and lack of riparian vegetation, western yellow-billed cuckoos do not occur along the proposed transmission line. Western yellow-billed cuckoos were not observed at the plant site or along the transmission line alignment during the field visits.

Least Bell's Vireo (*Vireo bellii pusillus*)

The least Bell's vireo is a Neotropical migrant that occupies southern California during the summer nesting season. This species nests and forages in riparian willow shrubs, or other shrubs in riparian areas. Three occurrences of this species are known from within five miles of the project area, all of which are located in riparian habitat along the Santa Ana River. The closest occurrence is located approximately 0.9 mile west of the project area; the others are located 3.25 and 4.1 miles west of the project area. Although the project area is located adjacent to the floodplain of the Santa Ana River and in close proximity to the river, there is no riparian shrub habitat that could support the nesting habits of this bird species. Due to the nature of the previous disturbance at the project site and the lack of riparian vegetation, the least Bell's vireo does not occur at the proposed plant site. Due to the continual disturbance and lack of riparian vegetation, the least Bell's vireo does not occur along the proposed transmission line. The least Bell's vireo was not observed at the plant site or along the transmission line alignment during the field visits.

Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is a permanent resident of coastal sage scrub habitat at elevations lower than 2,500 feet in washes, on mesas, and on slopes. Nesting and foraging habitat includes coastal sage scrub. Four occurrences of this species are known



from within five miles of the project area. One is located approximately 2.6 miles north of the project area in the Pedley Hills; a second is located approximately 4.75 miles south of the project area approximately 0.7 mile west of Mockingbird Reservoir; the third is located in the hills west of La Sierra, approximately 4.1 miles southwest of the project area; and the fourth is located in the same hills west of La Sierra, approximately 4.9 miles southwest of the project area. Due to the nature of the previous disturbance at the project site and the lack of high quality coastal sage scrub vegetation, the coastal California gnatcatcher does not likely occur at the proposed plant site. Due to the continual disturbance and lack of coastal sage scrub vegetation, the coastal California gnatcatcher does not occur along the proposed transmission line. The coastal California gnatcatcher was not observed at the plant site or along the transmission line alignment during the field visits.

Western Mastiff Bat (*Eumops perotis californicus*)

The western mastiff bat tends to roost in rocky areas and cliff faces. This species may also roost in buildings. Because of their large body size, they require considerable space to launch themselves into flight. Accordingly, roosting sites are usually situated high enough to permit a free downward fall for at least 10 feet. The bats feed primarily on moths, which constitute approximately 80 percent of their diet, but they also eat ground-dwelling crickets and grasshoppers. One occurrence of this species is known within five miles of the project area at the Norco City Library, located approximately four miles southwest of the project area. An estimated population of 12 bats was discovered roosting under the Spanish tile roofing there during a 1999 survey. It is possible that the bat will roost in buildings located near the project area. However, no sign of roosting bats was observed during the inspection of the old original wastewater treatment plant office building, the most likely place for roosting bats in the nearby vicinity of the proposed plant site. Western mastiff bats may forage over the project area from time to time, but they are not expected to roost there.

Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*)

The northwestern San Diego pocket mouse inhabits a variety of habitats, including coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. This species requires sandy/gravelly/rocky soils for burrowing, and herbaceous plants for food sources. One occurrence of this element is known from within five miles of the project area, approximately 4.5 miles east of the project area in ruderal habitat near a residential area in floodplain habitat. However, due to the nature of the previous disturbance at the project site, the northwestern San Diego pocket mouse does not likely occur at the proposed plant site. No pocket mouse or other heteromyid burrows were observed during the field visits at the plant site or along the transmission line alignment. The northwestern San Diego pocket mouse may occur along or near the transmission line alignment, due to its known occurrence in ruderal habitat in the project vicinity.

Stephens' Kangaroo Rat (*Dipodomys stephensi*)

The Stephens' kangaroo rat occurs almost exclusively in open grasslands or sparse shrublands with cover of less than 50 percent during the summer. This species typically occurs in sandy and sandy loam soils with a low clay to gravel content, allowing for

burrowing and sand bathing. Kangaroo rats typically burrow in relatively flat areas, but may forage on slopes. Three occurrences of this element are known within five miles of the project area. One is located approximately five miles south of the project area in the hills south of Mockingbird Reservoir; a second is also located about five miles south of the project area in the hills to the east of Mockingbird Reservoir; the third is located approximately five miles southeast of the project area in the hills near Muirfield Road. No kangaroo rat or other heteromyid burrows were observed during the field visits at the plant site or along the transmission line alignment. Due to the nature of the previous disturbance at the project site and the lack of kangaroo rat burrows, the Stephens' kangaroo rat does not likely occur at the proposed plant site. Due to the continual disturbance, the Stephens' kangaroo rat does not likely occur along the proposed transmission line.

#### San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*)

The San Diego black-tailed jackrabbit typically inhabits plant communities that include a mixture of shrubs, grasses, and forbs. Areas containing a mixture of shrubland and herbaceous cover are preferred over pure stands of shrubs or herbs. Black-tailed jackrabbits are common in sagebrush (*Artemisia* spp.), creosotebush (*Larrea tridentata*) and other desert shrublands; palouse, shortgrass, and mixed-grass prairies; desert grassland; open-canopy chaparral; and oak (*Quercus* spp.) and pine-juniper (*Pinus* spp., *Juniperus* spp.) woodlands. One known occurrence of the San Diego black-tailed jackrabbit is known from a sage scrub, saltbush, and non-native grassland in the Pedley Hills, approximately two miles north of the project area. Because of the amount of development surrounding the project area, there is a low potential for San Diego black-tailed jackrabbits to occur there. The San Diego black-tailed jackrabbit was not observed at the plant site or along the transmission line alignment during the field visits.

In addition to wildlife species from the CNDDDB query, a number of other species of concern were queried from the WRC MSHCP Interactive Species Map (<http://ecoregion.ucr.edu/>). The query included species occurrence information from museum records, published and unpublished accounts, environmental impact reports, and field notes of local naturalists within 2.5 km of the project area. These species, along with brief descriptions of their habitat, are presented in Appendix 6.3-D.

### 6.3.4 Impacts

#### 6.3.4.1 CEQA Environmental Checklist

Table 1.4-1 provides the CEQA checklist questions that are used to assess the significance of potential impacts to biological resources.

**Table 6.3-2 CEQA Environmental Checklist – Biological Resources**

Biological Resources - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS?		<b>X</b>		
b) Have a substantial adverse effect on any riparian habitat, or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG USFWS?		<b>X</b>		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means?		<b>X</b>		
d) Interfere substantially with the movement of any native resident, or migratory fish, or wildlife species, with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		<b>X</b>		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				<b>X</b>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		<b>X</b>		

#### **6.3.4.2 Discussion of Impacts**

*Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS?*

The proposed RERC site is relatively isolated by surrounding development to the north, west and south. The site has been extensively disturbed; soils were removed during borrow pit operations, and vegetation on the site is currently mowed on an annual

schedule. The RERC site has been a fallow field for approximately 10 years since its use as a borrow area, and it is currently dominated primarily by non-native grasses and other ruderal forbs, with a component of buckwheat scrub. The proposed transmission line alignment traverses areas that have been developed, landscaped and disturbed, as well as those supporting ruderal and disturbed non-native grassland vegetation. As such, most sensitive plant and wildlife species are not expected to occur either at the plant site or along the transmission line alignment.

The burrowing owl is the only sensitive species known to occur directly on the site. One adult burrowing owl was observed during the initial field visit. This bird appears to be using the proposed plant site to winter, as there has been no indication of breeding to date. The development of the project, therefore, will result in the displacement of a wintering burrowing owl, loss of burrowing owl wintering habitat (burrows), as well as loss of adjacent burrowing owl foraging habitat. This loss of burrowing owl wintering habitat is considered significant. However, this potential impact can be reduced to less than significant through successful application of the WRC MSHCP fee payment mitigation measure described in Section 1.5.1, conducting continuing field visits and preconstruction surveys mitigation measure described in Section 1.5.2, conducting environmental awareness training mitigation measure described in Section 1.5.3, and the temporary and permanent burrow mitigation measure described in Section 1.5.4.

*Would the project have a substantial adverse effect on any riparian habitat, or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG USFWS?*

The proposed plant site has been leveled and does not include any riparian habitat. The proposed plant site is located just south of the Santa Ana River channel, but would not likely have a substantial effect on the natural riparian community within the river channel corridor due to the intervening buildings and facilities associated with the City's Water Quality Control Plant. As such, no impacts to the Santa Ana River riparian habitat are expected as a result of the RERC project. There is no riparian vegetation along the proposed transmission line alignment.

The proposed plant site supports a regularly disturbed non-native grassland and buckwheat scrub. These types of open habitats are considered sensitive in the WRC MSHCP. Loss of 12 acres of non-native grassland – buckwheat scrub mosaic habitat is considered a significant impact. However, this potential impact can be reduced to less than significant through successful application of the WRC MSHCP fee payment mitigation measure described in Section 6.3.5.1, conducting environmental awareness training mitigation measure described in Section 6.3.5.3, and implementing the Best Management Practices mitigation measure described in Section 6.3.5.5. Impacts to the developed, landscape, disturbed, ruderal and non-native grassland areas along the proposed transmission line alignment would be temporary and negligible, and are considered adverse but less than significant.

*Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means?*

The proposed plant site has been leveled and does not include any riparian habitat, natural drainages, vernal pools or other wetland features. Therefore, construction of the proposed plant would not involve removal, fill, or hydrological interruption of any federal or state jurisdictional wetlands, waters of the U.S., streambeds or other jurisdictional features. There are scattered mule fat (*Baccharis salicifolia*) on the proposed plant site, but these highly scattered individuals do not constitute a riparian community. There is standing water adjacent to the eastern edge of Payton Avenue along the proposed transmission line alignment. However, this water does not appear to represent a jurisdictional feature, and any temporary disturbance to this water (if present) from vehicles accessing the pole locations during transmission line installation would be temporary, adverse but less than significant.

Runoff from the site during construction could result in a significant impact to water quality of the Santa Ana River. This potential impact can be reduced to less than significant through successful application of the environmental awareness training mitigation measure described in Section 6.3.5.3, implementing the Best Management Practices mitigation measure described in Section 6.3.5.5, as well as Best Management Practices identifies in the Project's Storm Water Pollution Prevention Plan.

*Would the project interfere substantially with the movement of any native resident, or migratory fish, or wildlife species, with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Use of the proposed plant site by a wintering burrowing owl can be considered "movement of any native...or migratory...wildlife species." The development of the project, therefore, will result in the displacement of a wintering burrowing owl and loss of burrowing owl wintering and foraging habitat used during a sensitive species as part of a migratory 'corridor', even absent breeding. This substantial interference with the migratory movement of a wintering burrowing owl is considered significant. However, this potential impact can be reduced to less than significant through successful application of the WRC MSHCP fee payment mitigation measure described in Section 6.3.5.1, conducting continuing field visits and preconstruction surveys mitigation measure described in Section 6.3.5.2, conducting environmental awareness training mitigation measure described in Section 6.3.5.3, and the temporary and permanent burrow mitigation measure described in Section 6.3.5.4.

*Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Construction and operation of the RERC project would not conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance. The WRC MSHCP is discussed below. The RERC project would be constructed on a previously disturbed site mostly surrounded by industrial development and facilities. There are no trees on the proposed plant site, and no trees or other sensitive

biological resources would be subject to disturbance along the proposed transmission alignment. No impacts are expected to occur.

*Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The proposed plant site supports a regularly disturbed non-native grassland and buckwheat scrub. These types of open habitats are considered sensitive in the WRC MSHCP. Loss of 12 acres of non-native grassland – buckwheat scrub mosaic habitat is considered a significant impact that triggers paying a per acre fee pursuant to the WRC MSHCP. As such, the impact of this potential conflict with an adopted Habitat Conservation Plan can be reduced to less than significant through successful application of the WRC MSHCP fee payment mitigation measures described in Section 6.3.5.1. Impacts to the developed, landscape, disturbed, ruderal and non-native grassland areas along the proposed transmission line alignment would be temporary and negligible, and are considered adverse but less than significant. As such, no fee payment is required for the negligible amount of disturbance associated with the transmission line.

The WRC MSHCP indicated that the proposed project was located in an area where focused burrowing owl and Brand's phacelia surveys are required for public and private projects. The impact of this potential conflict with an adopted Habitat Conservation Plan can be reduced to less than significant through conducting continuing field visits and preconstruction surveys as described in Section 6.3.5.2. Five site visits were conducted at the proposed plant site and along the proposed transmission line alignment. Brand's phacelia were not observed during three field visits conducted during March and April 2004, when they would likely have been visible if present. Breeding burrowing owls were not observed during four field visits conducted during February, March, and April 2004, including a field visit conducted during the peak breeding period after 15 April.

In summary, the potential impact of conflicting with an adopted Habitat Conservation Plan can be reduced to less than significant through successful application of the WRC MSHCP fee payment mitigation measure described in Section 6.3.5.1, conducting continuing field visits and preconstruction surveys mitigation measure described in Section 6.3.5.2, conducting environmental awareness training mitigation measure described in Section 6.3.5.3, and the temporary and permanent burrow mitigation measure described in Section 6.3.5.4.

#### **6.3.4.3 Cumulative Impacts**

Mitigation to offset the cumulative impacts of other projects planned for the area has been prearranged by measures set forth in the WRC MSHCP. Therefore, the RERC project, in conjunction with other projects planned for the area, would not result in significant cumulative impacts to biological resources.

#### **6.3.5 Mitigation and Monitoring**

The WRC MSHCP was developed in consultation with the USFWS and CDFG and includes mitigation measures, compensation requirements, and take limitations analogous to conditions of a Biological Opinion. Based on the protection and mitigation measures

developed for and implemented by the WRC MSHCP, Incidental Take Minimization Measures would be incorporated into the project activities as a condition of project approval. These and other measures designed to reduce the impacts to biological resources as a result of the RERC project to a level that is less than significant are discussed below.

#### ***6.3.5.1 Incidental Take Minimization Measures Identified in the WRC MSHCP***

***Payment of WRC MSHCP fee.*** According to the WRC MSHCP, conversion of multi-purpose open space land does not require compensatory mitigation through purchase of preserve land by a project applicant. Rather, the conversion triggers a requirement to provide funds on a per-acre basis to cover a portion of the enhancement, management, and administration costs associated with the existing preserve system. The mitigation fees have been set at \$5,620 per acre. As such, payment of \$67,440 (12 acres of impact at \$5,620 per acre) would be required of the RERC project. Payment of this WRC MSHCP fee would reduce the intensity of the identified impacts to the adopted HCP, sensitive communities, and sensitive species to less than significant.

#### ***6.3.5.2 Preconstruction Surveys***

***Conduct Continuing Field Visits and Preconstruction Surveys.*** Preconstruction surveys would be conducted prior to ground-disturbing activities to ensure clearance of any sensitive wildlife species. If any wildlife is found within the project disturbance areas, individuals would be salvaged and allowed to relocate on their own, or would be actively relocated by approved biologists as directed by the CDFG. Specific preconstruction surveys would be conducted for burrowing owls. In addition, monthly field visits will be continued at the proposed plant site and along the appropriate portions of the proposed transmission line alignment to continue the evaluation of the presence of breeding burrowing owls. Conducting continuing field visits through August 2004 and preconstruction surveys would reduce the intensity of the identified impacts to sensitive species to less than significant.

#### ***6.3.5.3 Environmental Awareness Training***

All on-site construction personnel would be trained in recognizing sensitive habitat areas and sensitive species that could be found during construction. Emphasis would be placed on the importance of avoiding impacts to these species and their habitats, especially those that are likely to utilize the open habitats (for example, burrowing owl) and the nearby Santa Ana River riparian corridor. Conducting environmental awareness training would reduce the intensity of the identified impacts to sensitive species and nearby waters of the U.S., wetlands and riparian vegetation to less than significant.

#### ***6.3.5.4 Species-Specific Measures***

The following measures would be implemented to avoid impacts to the burrowing owl, the only sensitive species known to occur at the project site. If other unanticipated sensitive species are encountered during the continuing monthly field visits or



preconstruction surveys, specific avoidance measures would be implemented as defined in the WRC MSHCP.

### **Burrowing Owl**

One burrowing owl was observed at the proposed plant site during the initial field visit conducted during December 2003. Burrowing owls have likely been attracted to the site because of the presence of California ground squirrel burrows.

The burrowing owl that winters at the proposed plant site may have to be relocated from the site prior to the commencement of construction activities. This mitigation measure shall be conducted outside of the owl's breeding season, which generally occurs from February 1 through August 31 (Thomsen 1971; Zarn 1974). In addition, the destruction of the owl burrow(s) will require the enhancement of existing ground squirrel burrows, or creation of artificial burrows, in adjacent suitable habitat that is preferably contiguous with the foraging habitat of the affected owl. Owl relocation, as well as discouragement of owls from returning to the site, will occur in the following manner:

1. During the nonbreeding season (September 1 through January 31), burrowing owls occupying the proposed plant site shall be evicted by passive relocation. Passive relocation would include installation of one-way doors on burrow entrances that would let owls out of the burrow but would not let them back in, as described in the CDFG Staff Report on Burrowing Owls (CDFG 1995).
2. If construction is to occur during the breeding season (February 1 through August 31) and prior to the relocation of the owls, 75-meter (246-foot) protective buffers would be maintained around burrows occupied by owls until a CDFG approved biologist approves other action. Other actions could include passive relocation if it is determined that owls have not begun laying eggs, or postponement of construction in the area until the young are fledged and no longer dependent upon the nest burrow.
3. Once fledglings are capable of independent survival and adult non-breeding owls have successfully been relocated offsite, potential owl habitat (squirrel burrows) would be eliminated from the site in order to keep the owls from returning. California ground squirrels would be removed from the site by trapping and relocation, or by other approved means. Following squirrel removal, existing ground squirrel burrows would be destroyed.

Regardless of whether burrowing owls are observed again at the proposed plant site, artificial burrows shall be installed as part of the final landscape plan at the RERC site. These permanent burrows shall be established at the toe of the steep slope on the eastern edge of the plant site, and shall be protected by as large a non-native grassland buffer area as practicable. Other on-site artificial burrow areas may be identified in the final landscape plan for the RERC project. The location chosen shall provide the least amount of nearby operational activity and the largest amount of buffer area possible. One artificial burrow shall be installed for every appropriately-sized burrow removed during construction.

In addition, the RPU shall coordinate with the County of Riverside Parks and Recreation Department and other County and City agencies to identify possible nearby locations for

placement of permanent artificial burrows should the artificial burrows at the plant site prove to be infeasible. These areas could include the land managed by the County of Riverside Parks and Recreation Department located immediately northeast of the proposed plant site, at the end of Payton Avenue along the Santa Ana River. In addition, the TORO site located about 0.75-mile east-northeast of the proposed plant site shall be investigated for placement of artificial burrows and compensation for burrowing owl habitat as necessary.

#### ***6.3.5.5 Best Management Practices***

Best Management Practices (BMPs) shall be implemented at the proposed plant site during construction to minimize potential impacts to the Santa Ana River. These BMPs shall include permanent and temporary measures to restrict runoff from the site reaching the River. In addition, temporary measures to reduce siltation and avoid pollutants from entering the Santa Ana River shall be implemented during site grading and other construction activities.

#### ***6.3.5.6 Reporting Requirements***

If the mitigation measures prescribed in the WRC MSHCP are approved and employed, RPU would prepare and submit a final post-construction report to the WRC MSHCP Joint Powers Authority. The report would address any sensitive species encountered at the site during construction, any monitoring activities performed, and the effectiveness of protection and mitigation measures.

### **6.3.6 Involved Agencies and Agency Contacts**

The state agencies involved in the biological resources management for the RERC project include:

1. California Department of Fish and Game  
4775 Bird Farm Road  
Chino Hills, CA 91709
2. California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512

The federal agency involved in the biological resources management for the RERC project include:

1. U.S. Fish and Wildlife Service  
Carlsbad Field Office  
6010 Hidden Valley Road  
Carlsbad, CA 92009

### 6.3.7 References

Bent, A. C.

- 1938 Life histories of North American birds of prey. Part 2. U.S. National. Museum Bulletin 170. 482pp.

California Department of Fish and Game (CDFG)

- 1995 Staff Report on Burrowing Owl Mitigation. Memorandum Prepared by the California Department of Fish and Game. October 17.
- 2004a State and Federally Listed Endangered, Threatened and Rare Plants of California. April
- 2004b State and Federally Listed Endangered, Threatened and Rare Plants of California. April
- 2004c Special Animals. California Natural Diversity Database. January
- 2004d Special Vascular Plants, Bryophytes and Lichens List. California Natural Diversity Database. April

California Energy Commission (CEC)

- 1992 Instructions to the California Energy Commission Staff for the Review of and Information Requirements for an Application for Certification, California Energy Commission, Energy Facilities Siting and Environmental Protection Division, Sacramento
- 1997 Rules of Practice and Procedure & Power Plant Site Certification, California Energy Commission, Sacramento

California Native Plant Society (CNPS)

- 2001 Inventory of the Rare and Endangered Plants of California. Sixth Edition. August

Environmental Laboratory

- 1987 Guidelines for Wetlands Delineation.

Governor's Office of Planning and Research

- 1998 *CEQA: California Environmental Quality Act Statutes and Guidelines*. Governor's Office of Planning and Research, Sacramento, California.

n.d. <http://ceres.ca.gov/ceqa/rev/approval.html>

Haug, E. A., B. A. Millsap, and M. S. Martell

- 1993 Burrowing Owl (*Speotyto cunicularia*). In *The Birds of North America*, No. 130 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.

Marti, C. D.

- 1974 Feeding ecology of four sympatric owls. *Condor* 76: 45-61.

Martin, D. C.

- 1973 Selected aspects of burrowing owl ecology and behavior. *Condor* 75: 446-456.

Riverside, City of

- 2001 "Treatment Facility History." Chronology of construction and expansion at the city's wastewater treatment plant, provided to the surveyors by employees Ernie Meloy and Karen Conner.

Robertson, J. M.

- 1929 Some observations on the feeding habits of the burrowing owl. *Condor* 31: 38-39.

Thomsen, L.

- 1971 Behavior and ecology of burrowing owls on the Oakland Municipal airport. *Condor* 73: 177-192.

U.S. Fish and Wildlife Service (USFWS)

- 2002 Endangered and Threatened Wildlife and Plants; Review of Species that are Candidates or Proposed for Listing as Threatened or Endangered; Annual Notice of Findings on Recycled Petitions; Annual Description of Progress on Listing Actions. *Federal Register*. Vol. 67. No. 114: 40657-40679.

Zarn, M.

1974 Burrowing Owl, Report No. 11. Habitat management series for unique or endangered species. Bureau of Land Management, Denver. 25 pp.

